

Digital Remote Control Transmitter

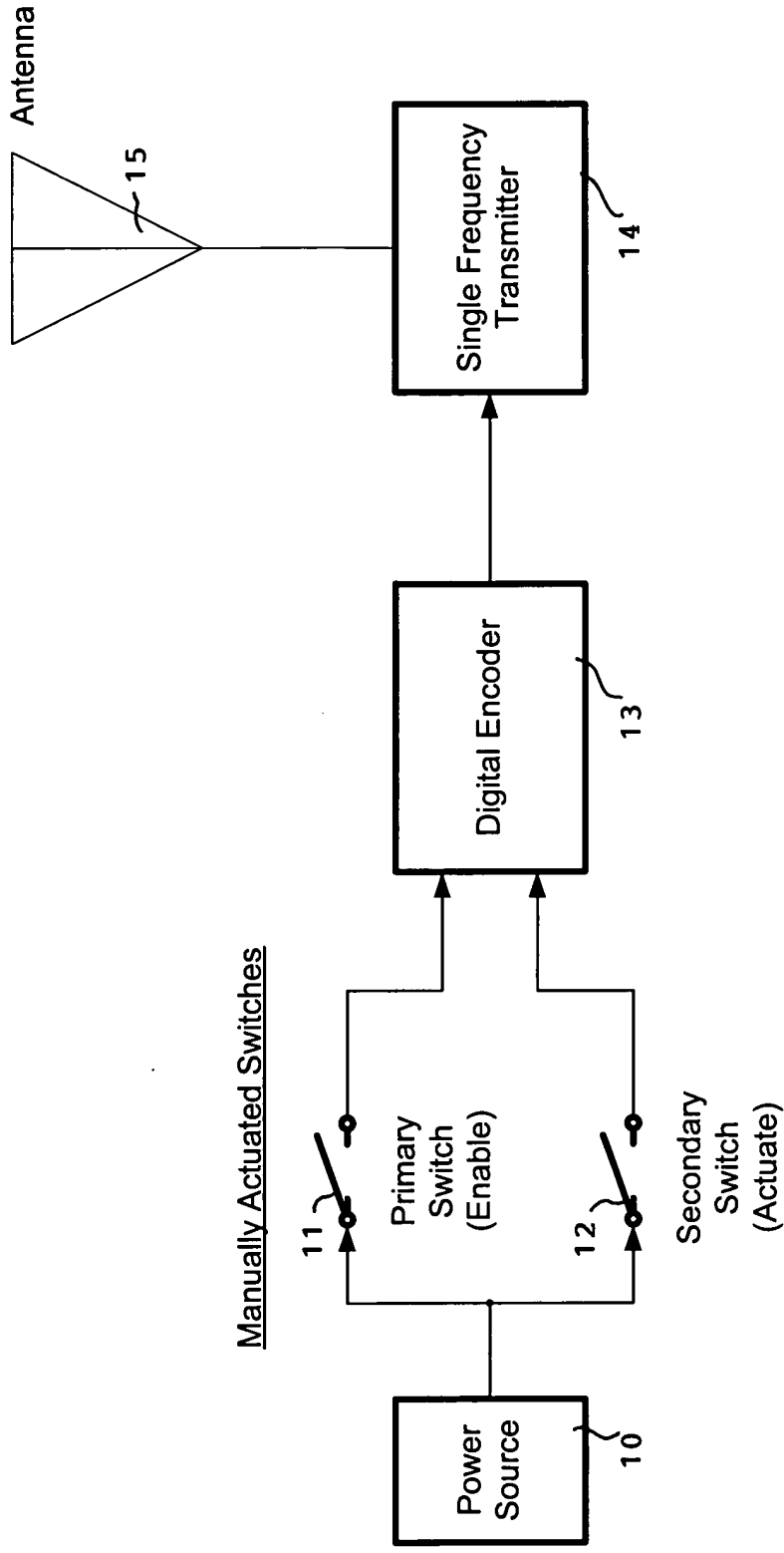


Figure 1

Digital Remote Control Receiver

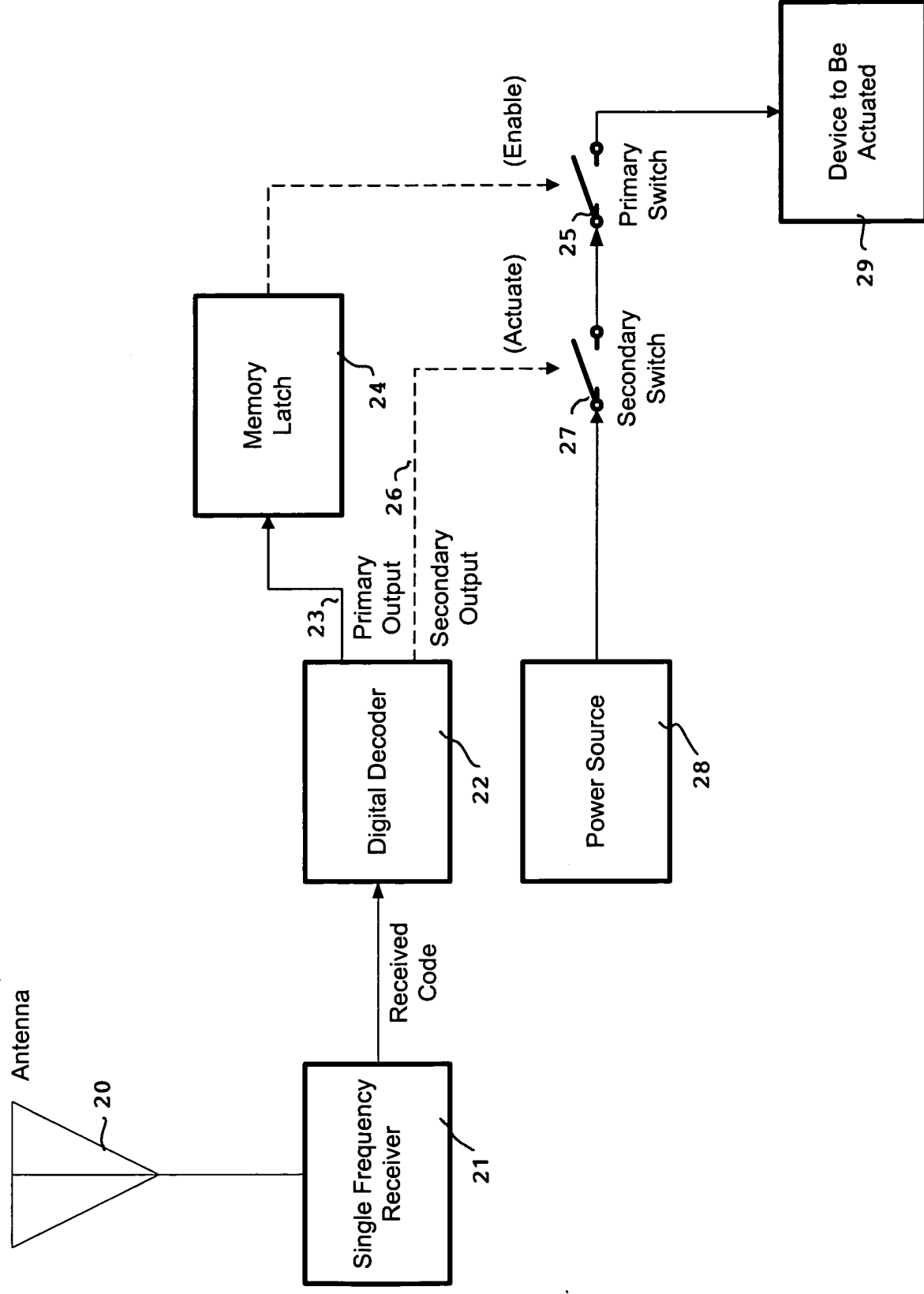


Figure 2

Code Timing Diagram -- Preferred Embodiment

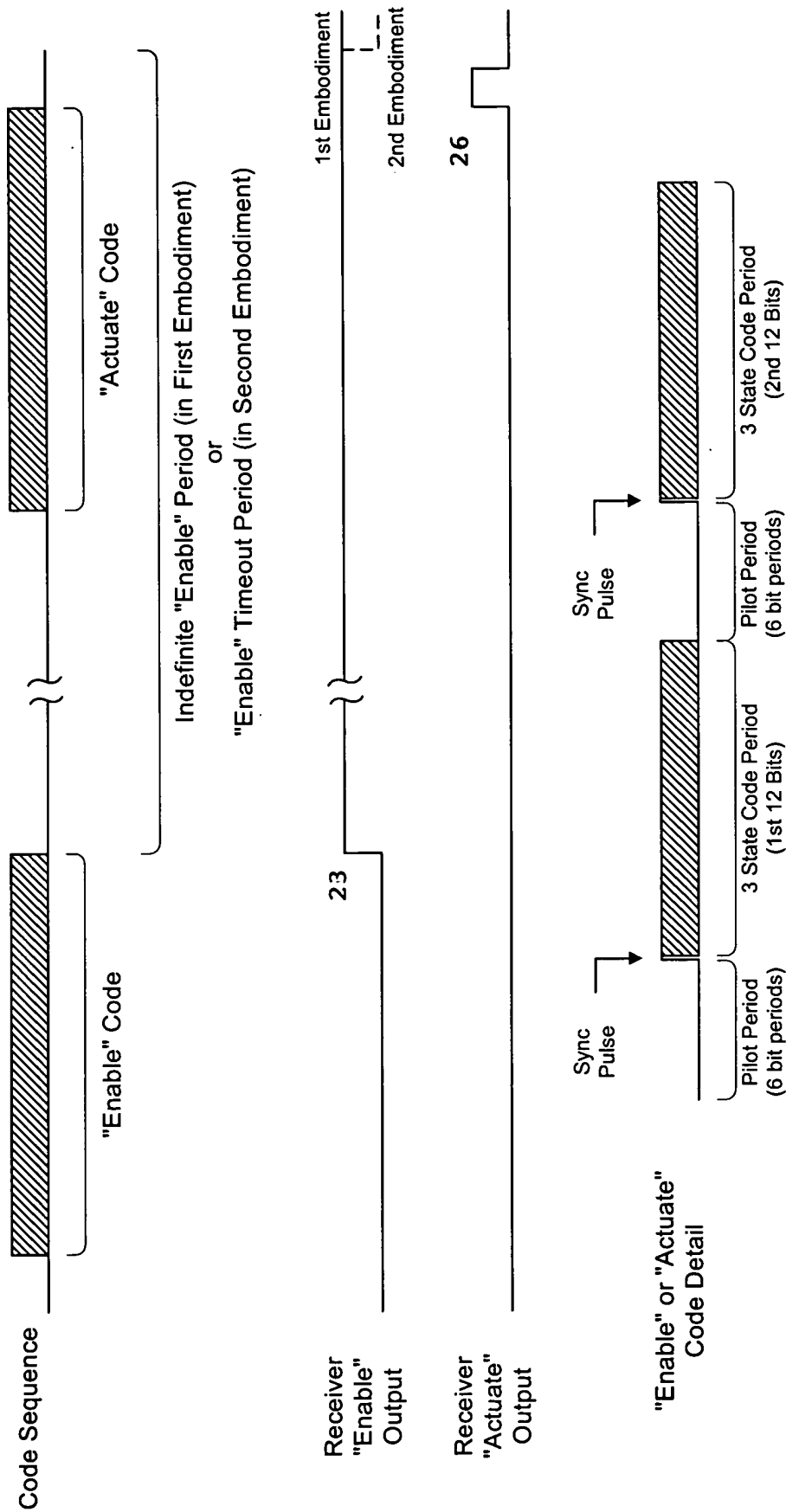


Figure 3

Code Period Detail -- Preferred Embodiment

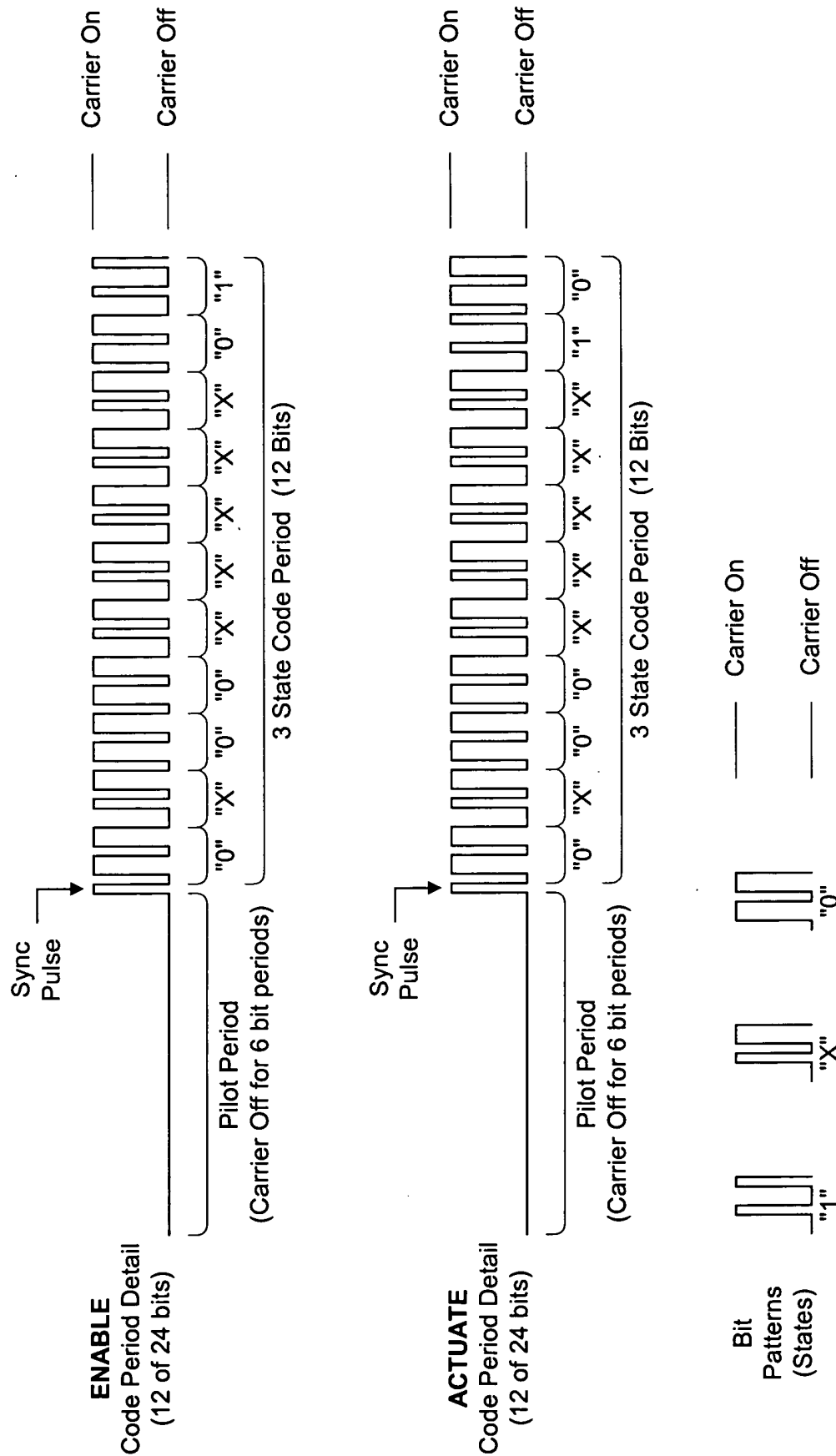


Figure 4

Receiver Detailed Block Diagram -- Indefinite Enable Period

(In another embodiment the HT6032 and CD4013BE functions could be performed in a microcomputer chip, such as a Microchip PIC16C622A with embedded program.)

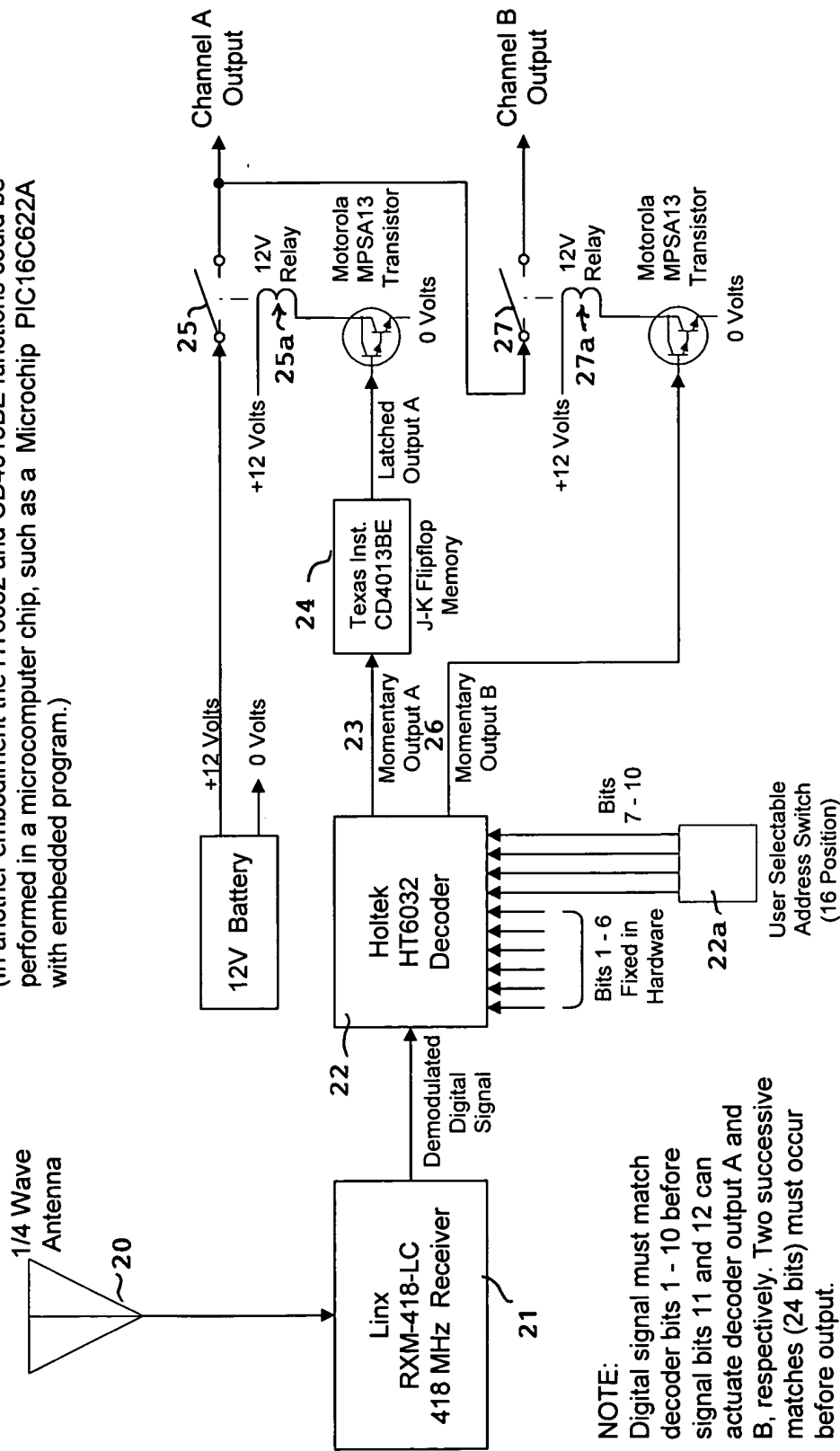


Figure 5

Receiver Detailed Block Diagram -- Timed Enable Period

(In another embodiment the HT6032 and CD4047BE functions could be performed in a microcomputer chip, such as a Microchip PIC16C622A with embedded program.)

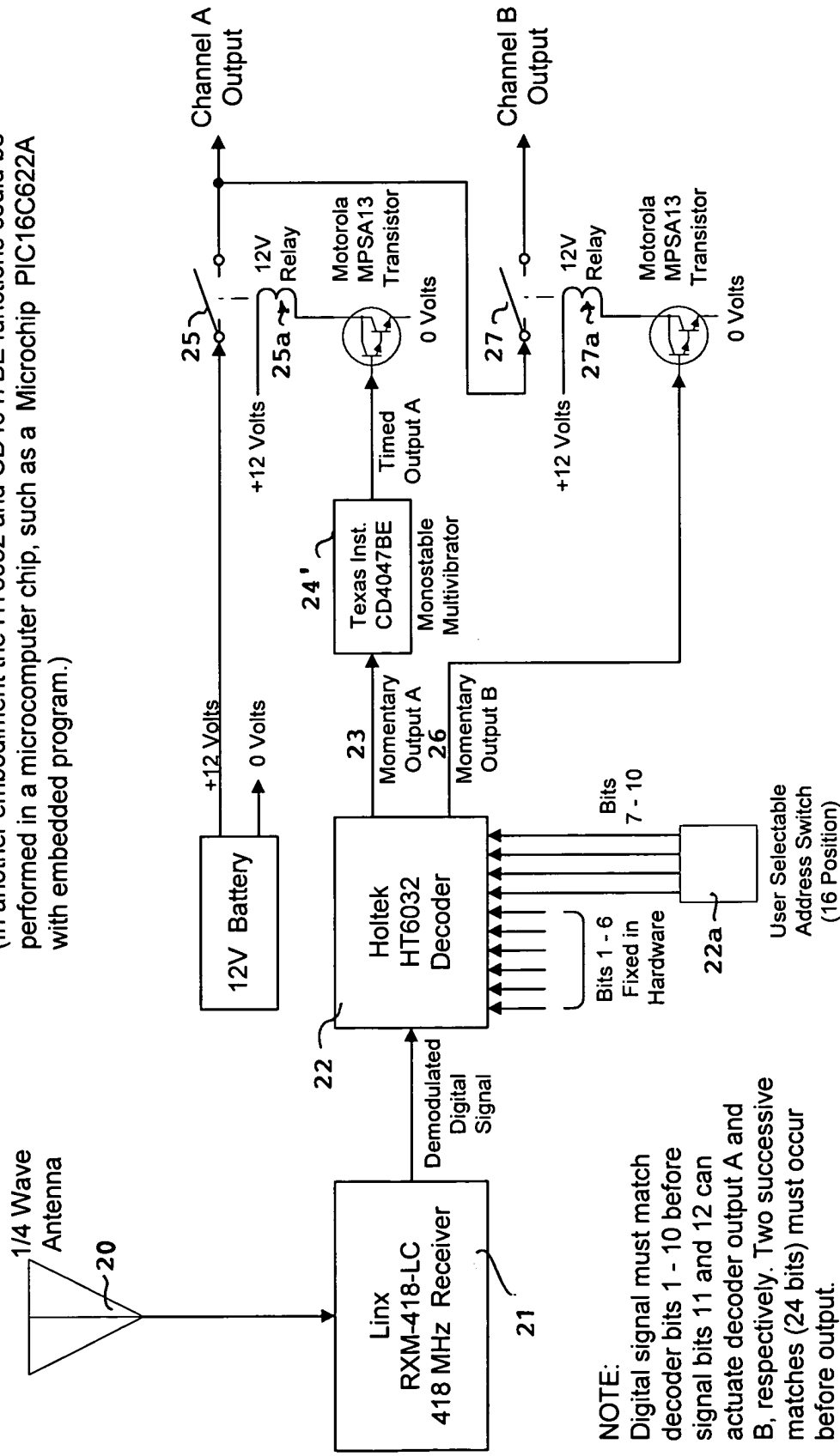
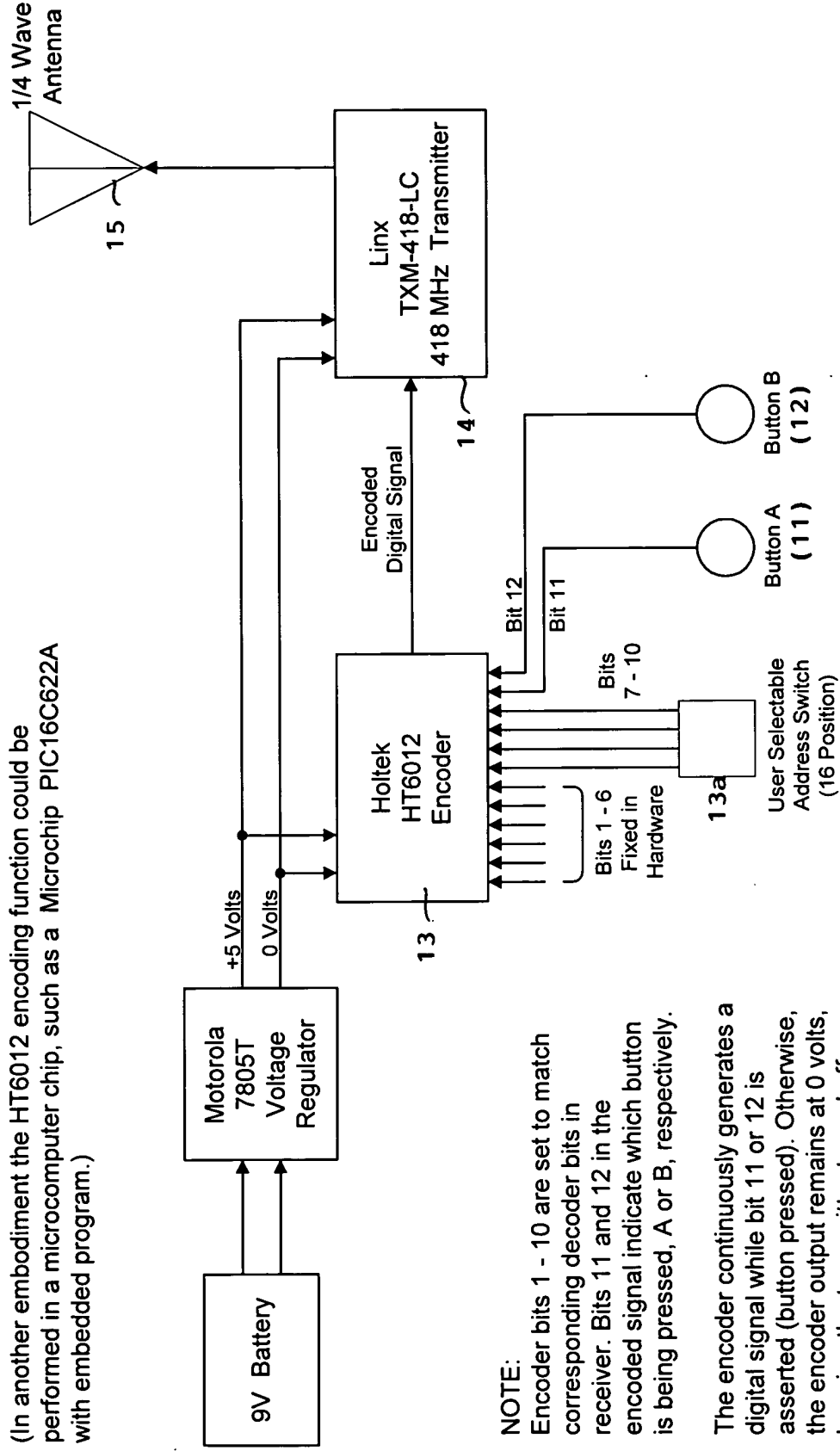


Figure 6

Transmitter Detailed Block Diagram

(In another embodiment the HT6012 encoding function could be performed in a microcomputer chip, such as a Microchip PIC16C622A with embedded program.)



NOTE:

Encoder bits 1 - 10 are set to match corresponding decoder bits in receiver. Bits 11 and 12 in the encoded signal indicate which button is being pressed, A or B, respectively.

The encoder continuously generates a digital signal while bit 11 or 12 is asserted (button pressed). Otherwise, the encoder output remains at 0 volts, keeping the transmitter turned off.

Figure 7

Block Diagram Detail -- Sequencer Module

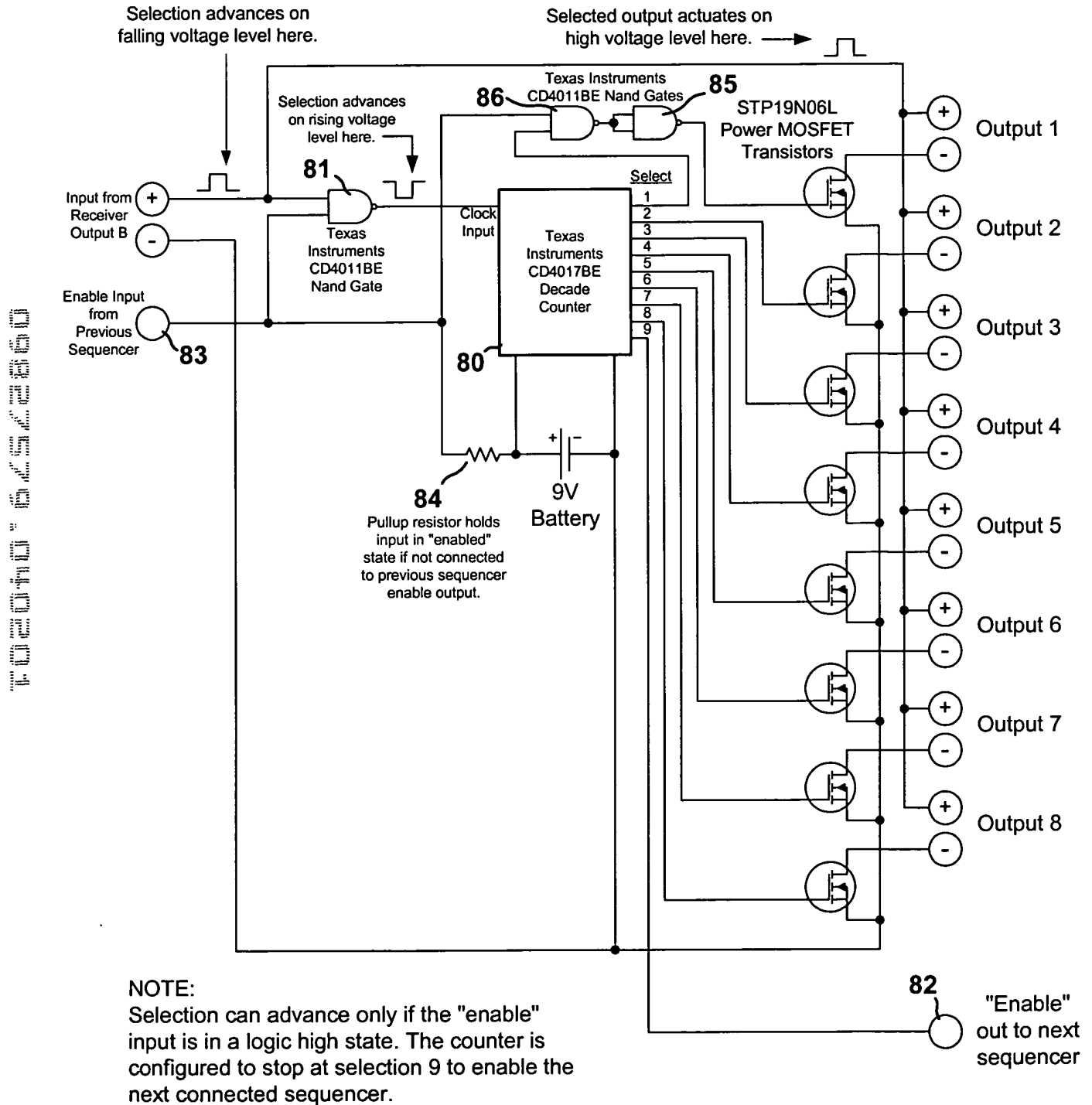


Figure 8